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10. An apparatus comprising:

- an interface adapted to couple with a communication network;
- a controller coupled to the interface;
- a boot program executable by the controller;
- a first operating code to control the apparatus;
- a first memory coupled to the controller and adapted to store the boot program and the first operating code; and

a second memory coupled to the controller, the controller operable for executing the boot program to receive a plurality of packets from a remote computer coupled to the communication network and to check the validity of each packet of the plurality of packets and to store a portion of each packet in a second memory

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coupled to the controller, and after receiving an upgrade command from the remote computer and after checking the validity, to replace the first operating code with a second operating code based on the portion of each packet stored in the second memory.

- 11. The apparatus of claim 10 further comprising a serial line interface coupled to the controller and adapted to couple with a local computer.
- 12. The apparatus of claim 10 wherein the interface includes a telephone line coupler.
- 13. The apparatus of claim 10 further comprising a data pump coupled to the controller.
- 14. The apparatus of claim 10 wherein the second memory includes random access memory (RAM).
- 15. The apparatus of claim 10 wherein the first memory includes programmable read only memory (PROM).
- 16. The apparatus of claim 10 further comprising a modern adapted for communicating with the remote computer.
- 17. A method comprising:

coupling a modem to a communication network;

executing a boot program of the modem;

executing a first operating code for the modem stored in a first memory of the modem based on an instruction executed by the boot program;

receiving a plurality of packets via the communication network;

checking validity of each packet of the plurality of packets;

storing a portion of each packet of the plurality of packets in a second memory of the modem; and

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after receiving an upgrade command via the communication network, replacing the first operating code in the first memory with a second operating code based on the portion of each packet of the plurality of packets stored in the second memory.

- 18. The method of claim 17 further comprising executing the boot program after replacing the first operating code in the first memory with the second operating code.
- 19. The method of claim 17 wherein storing the portion of each packet of the plurality of packets in the second memory includes storing the portion in a location of the second memory based on an address of each packet.
- 20. The method of claim 17 further comprising copying the boot program to a random access memory.
- The method of claim 17 wherein checking validity includes checking for errors.
- 22. The method of claim 17 further comprising generating a local checksum data byte at the modern.
- 23. The method of claim 22 further comprising receiving a remote checksum via the communication network and comparing the local checksum and the remote checksum.
- 24. The method of claim 17 further comprising executing a hard boot of the modern.
- 25. The method of claim 24 wherein executing the hard boot of the modem includes executing the second operating code.
- 26. The method of claim 17 wherein receiving the plurality of packets includes receiving a plurality of packets each packet having a field containing a packet length and a checksum.

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27. A method comprising:

executing a first operating code stored in a first memory;
receiving a plurality of packets via a communication network, each packet
having an address field having an address and an operating code field having a
portion of program data;

checking each packet of the plurality of packets for validity;
for each packet, storing the portion of program data of the packet at an
address of a second memory based on the address of the packet; and

after receiving an upgrade command via the communication network, replacing the first operating code in the first memory with a second operating code based on the program data stored in the second memory.

- 28. The method of claim 27 wherein checking each packet of the plurality of packets for validity includes comparing a checksum.
- 29. The method of claim 27 further comprising executing the first operating code if a packet of the plurality of packets includes an error.
- 30. The method of claim 27 wherein replacing the first operating code in the first memory with the second operating code includes reprogramming a flash programmable read only memory (PROM).